

Engineering Department 195 N. 145th Ave., Building D Goodyear, Arizona 85338

LANDSCAPE PLAN CHECKLIST

The landscape checklist shall be used as a guide only for landscape design and construction. This guide shall not be interpreted as an absolute list of requirements. The City of Goodyear may reserve the right to request additional documentation and information to guarantee a development meets and complies with all City guidelines, ordinances, codes, agreements, details and the MCDOT Roadway Design Manual.

The landscape drawings are considered part of the improvement plan approval process and shall be submitted along with the civil development plans. If civil development plans are not necessary, the landscape plans will be recognized and accepted for review independently.

CONSTRUCTION PLAN REVIEW REQUIREMENTS

- Landscape construction documents shall comply with the approved site plan, civil plans, design stipulations and overall coverage requirement.
- Provide one stamped approved reference copy of the approved site plan and stipulations with the first submittal package.
- Landscape design must be compatible with adjacent properties.
- Prepare landscape drawings on a 24" x 36" sheet with a minimum 2" left border and ½" border on all other sides.
- Additional information and requirements on the City of Goodyear Landscape Standards, please reference Chapter #7 of the City of Goodyear Engineering and Design Guidelines and/or Article #5 of the City of Goodyear Zoning Ordinance.

COVER SHEET Project Name Landscape Architect Contact Information Project Address Project Engineer Contact Information Vicinity Map Owner/Developer Contact Information As-built Certification Block Landscape Approval Block Blue Stake North Arrow Kev Map Plan Review Case Number (Assigned) Landscape Architect Signature/Seal Plan Scale: 1" = 30' min., 1" = 20' preferred Maintenance Provider Water Provider Landscape Area (Square Feet) City Maintenance Area (Square Feet) Mainline connection/water source location Mainline trench in the rights-of-way (l.f.) Planting Schedule (Size/Quantity) Irrigation Schedule

GENERAL PLAN REQUIREMENTS

- Identify features and amenities existing and/or new.
- Landscape plans shall have the same basic geometric layout as civil plans.
- Provide a dimension from the centerline of the right-of-way to the property line.
- Identify the location of water, sewer and storm drain service. Coordinate these locations with the civil base file.
- Identify all fire hydrant locations, new or existing.
- Identify all retention area and provide contour elevations (i.e. 4:1).
- Identify match lines with sheet references.
- Label all roadways.

- Identify all sidewalks, curbs and curb cuts.
- Identify all overhead power lines, street lights and traffic signals.
- Identify any project walls and monument signage outside the rights-of-way and public utility easements.
- Provide all required general notes found at the back of this checklist.
- Identify all known locations of traffic signage providing for 50' of unobstructed visibility at all times.

PLANTING INFORMATION

- Any plant material in the public rights-of-way shall comply with all the requirements of the City Code and with the criteria of the Arizona Department of Water Resources (ADWR). The criterion specifies plant material which has low water needs and encourages the conservation of our water resources.
- Each plant type shall be identified by its botanical and common name.
- Each plant type shall have its own individual symbol.
- All salvage and existing plant material shall be cataloged and identified by their botanical and common name.
- Unless otherwise specified, all trees shall be a minimum of fifteen (15) gallons in size and at least fifty (50) percent of those trees must be twenty-four (24) inch box or larger in size.
- All shrubs shall be a minimum of five (5) gallon in size.
- All landscape areas shall be finished with a natural topping material which may include, but not limited to, the following: turf, groundcover, planting, decomposed granite two (2) inches at minimum depth.
- Plant material that is high in pollen production is discouraged. Extreme care should be exercised when using plant material that is known to be poisonous.
- Plant material shall be placed in such a way as to maximize survivability (i.e., low water use plants should not be place in drainage ways, and the use of frost-tender plants should be limited to accent locations, not primary focal points).
- All trees selected shall be compatible with the overall site and landscape plan, as well as adjacent sites.
- A minimum of one (1) tree shall be planted for every twenty-five (25) feet of lineal street frontage.
- All plant material selected for placement in retention areas, park facilities, rights-ofway and City maintained facilities shall come from the City of Goodyear Approved Plant list.
- When Olive Trees (Olea europaea) are specified, they shall be the "Swan Hill" variety.
- All Mexican Fan Palms (Washington robusta), California Fam Palms (Washington filifera), and Queen Palms (Cocos plumosa) shall have a minimum five (5) foot trunk height measured from the base of the trunk to the base of the fronds when located within the public rights-of-way or within fifty (50) feet of the street property line.
- Plant material shall not interfere with any and all traffic signage. Allow for fifty (50) feet of unobstructed visibility at all times.
- Plant material shall be grouped according to similar water needs.
- No turf will be allowed within the City of Goodyear rights-of-way without special approval. Special approval must be demonstrated with the approved Final Plat.
- Turf shall be quantified by the total square feet on planting schedule.
- Low water use trees, shrubs, flowers and groundcover are to be used in conjunction with desired landscape material.
- No plant material will be allowed within seven (7) feet of a fire hydrant. No plant material will be allowed between fire hydrant and curb.
- Unless otherwise noted, decomposed granite shall be extended under plant material.
- Decomposed granite shall be selected from the City of Goodyear Approved Plant List and comply with adjacent properties where applicable.

- Shrubs planted within the safety triangle are to have a mature height of not more than eighteen (18) inches. Height shall be from edge of pavement, and total height shall include the height of any mounding. Groundcover is preferred..
- Trees planted within the safety triangle are to have a clear trunk pruned to a height of seven (7) feet or greater upon installation. Height shall be from edge of pavement, and total height shall include the height of any mounding.
- Palm trees shall not be installed in the rights-of-way unless the maintenance and water for the palm trees are provided by the owner.
- Decomposed granite shall be selected from the City of Goodyear Approved Plant List.
 All D.G. shall be ¾" minus.
- Moderate and high water plant material shall be replaced with low water use landscapes – xeriscapes.
- Trees shall provide a ten (10) foot minimum setback from all water, sewer and storm drain service. Any trees located within this setback shall call out the use of a biobarrier or be relocated outside of this type of easement.
- The maximum distance between shrubs, trees and ground cover limits on the project site shall not exceed 7"-0".
- Trees shall be located so that the mature tree canopy does not extend into the street.
- All trees with spreading habits, seed pods or thorns shall be planted a minimum of fifteen (15) feet from walls, walks and pavement.
- Tree placement between sidewalk and curb along arterial and collector roadways is discouraged.
- Sand shall be double washed premium bunker sand at a minimum 12" depth.
- Thornless and non-deciduous tree shall be selected for placement in parking areas with one tree being provided for every 5 parking stalls.
- All retention basins shall receive a minimum average of 10 trees per acre, base upon the net acreage, with a minimum of three varieties and a maximum of seven varieties.
- Multi-trunked trees will not permitted in a retention basin.

Plant Details					
	Trees Shrubs Palms		Cacti Salvage Ocotillo		Ground cover D.G. Other

LANDSCAPE WATERING SYSTEMS – DESIGN REQUIREMENTS

All watering systems installed in the City shall conform to the following specifications:

- All irrigation systems and landscape areas shall be designed, constructed, and maintained as to promote water conservation and prevent water overflow or seepage into the street, or parking area.
- All watering systems shall be automatic, and shall utilize a pressure type vacuum breaker or reduced pressure vacuum breaker (as required) before the control valves.
- City of Goodyear maintained standard equipment: Reference Chapter #7 of the Engineering Design Standards and Policies Manual.
- All watering systems must be independent of other users, i.e. landscape dedicated to the City for maintenance shall have a separate power and water meters from all other landscape watering systems.
- Friction pressure loss calculations for the longest run in the system for both full-circle and part-circle circuits shall be provided along with all other details which may be required to verify the capabilities of the system.

Irrigation plans:

- Plans shall indicate existing design and minimum operating water pressure requirements.
- Identify the location of the power source.
- Identify the water source and location of proposed tap.
- Specify brand, model, diameter, pressure rating and/or size of each material item used in the construction of the water system.
- Show details for controller valves, pressure regulators, backflow prevention devices, security enclosures, valve boxes, flush caps, trenching, backfill, controller security cabinets, sprinklers, emitters, bubblers and all other details necessary and applicable for review.
- Provide a legend on each irrigation plan sheet.
- Trees and shrubs shall be on separate valves.
- Power source to be located within a median or within the right-of-way behind the curb. If the power source cannot be located within the right-of-way a utility easement must be provided.
- Show the location of sprinkler heads and bubblers when applicable.
- Provide an emitter schedule or show emitters.
- Mainline and lateral lines to be sized on plans or with pipe size schedule.
- Class 200 is the minimum allowable class of pipe for laterals.
- Mainline shall be SCH40.
- Identify water point of connection, controller location, power-point-of-connection, and backflow prevention unit.
- Use of bubblers in the right-of-way, medians or City maintained areas are prohibited without prior approval.
- Install an isolation ball valve to all control valves.
- Gravel sump, pea gravel shall be a minimum six (6) inches in depth in valve boxes.
- PVC sleeve depth under roadways shall be a minimum of twenty-four (24) inches to the top of sleeve. Trenches for mainlines shall be a minimum of eighteen (18) inches in depth. Trenches for lateral lines shall be a minimum of twelve (12) inches in depth.
- Provide a quick coupler at all ramadas and playgrounds.
- Quantify the total lineal footage of mainline trenching in the right-of-way on plan cover sheet.
- All mechanical equipment, electrical meters and similar utility devices shall be screened from the public view with appropriate plant material.
- Appropriate irrigation facilities must be shown and demonstrated on plans to sufficiently water a large turf area within an eight (8) hour period as required. A pressure-type vacuum breaker shall be required with the installation of all sprinkler systems.
- No galvanized pipe shall be used.
- Pressure vacuum breaker or reduced pressure assembly shall be used.
- All irrigation pipe shall be 1" minimum.
- Irrigation mainline trenching shall provide for an 18" minimum depth and 12" depth for all laterals.

HARDSCAPE

- Structures, fireplaces, and barbeques are not allowed to be constructed off of the landscape plans. These amenities are shown for reference only and shall be submitted to Building Safety for construction review and approval.
- All walls and monument signage shall be referenced on the landscape plans behind the rights-of-way and public utility easements.
- All tot-lots require an approved shade canopy.
- One-third of any boulder shall be set in the ground. Maximum vertical exposure shall be eighteen (18) inches above grade.

Sidewalks located in park areas shall be 8' minimum for pedestrian traffic and 10' minimum for multi-use.

MEDIAN LANDSCAPING

- The first ten (10) feet and the last ten (10) feet of a median are to be decorative concrete (stamped concrete, exposed aggregate, etc. as approved by the City.
- Trees shall be located a minimum of five (5) feet from the back of the median curb. Mature tree canopy size shall be considered and may require a greater setback.
- Decomposed granite shall be ¾" minus.
- Decomposed granite shall be selected from the City of Goodyear Approved Plant List
- Trees shall be provided at the rate of one (1) tree per each 25-lineal feet of median length.
- Reference: Chapter #7.2 of the Engineering Design Standards and Policies Manual for further information.

NON-PAVED TRAILS

• Reference: Chapter #7.4 of the Engineering Design Standards and Policies Manual for further information.

RESTRICTED LANDSCAPING

• Reference: Chapter #7.4.7 of the Engineering Design Standards and Policies Manual for further information.

NATIVE PLANT RELOCATION & REVEGETATION

 Reference: Chapter #7.5 of the Engineering Design Standards and Policies Manual for further information

PARK FACILITIES

 Reference: Chapter #7.6 of the Engineering Design Standards and Policies Manual for further information

PLAYGROUNDS

- Playgrounds shall contain some type of shading, either from ramadas (16-ft x 16ft minimum) and/or non-deciduous trees (30-inch box minimum).
- Tot-lots require the installation of a shade canopy.
- Playgrounds shall meet or exceed all current U.S. CPSC, ADA, and ASTM Standards.
- Sand shall consist of double washed premium bunker sand, at a minimum of 12inches.
- Please contact the City Parks Department for specific direction and playground construction and inspections.

FLOOD RETENTION BASINS

• Reference: Chapter #7.7 of the Engineering Design Standards and Policies Manual for further information.

SIGHT VISIBILITY AREAS

- Residential street site visibility areas shall be determined per Chapter #4 of the Engineering Design Standards and Policies Manual.
- Arterial and collector roadway site visibility areas shall be determined using the criteria set forth in Ch. #9 of the MCDOT Roadway Design Manual.

AS-BUILT DRAWINGS

Reference: Chapter #10.1 of the Engineering Design Standards and Policies Manual.

- Identify the water source and location of proposed tap.
- Specify brand, model, diameter, pressure rating and/or size of each material item used in the construction of the water system.
- Show details for controller valves, pressure regulators, backflow prevention devices, security enclosures, valve boxes, flush caps, trenching, backfill, controller security cabinets, sprinklers, emitters, bubblers and all other details necessary and applicable for review.
- Additional information and checklist can be located on the C.O.G. website under the Engineering page.

LANDSCAPE PLAN REVISION: POST APPROVAL:

- All post approval landscape revisions shall be submitted to the front counter of Engineering for review and consideration.
- Provide deltas and clouding to clearly delineate the proposed revision.
- Provide the original mylar cover sheet and include a re-approval block for signature.
- Identify the sheet numbers for proposed revisions on the cover sheet for review and consideration.

REQUIRED PLAN NOTES

*All plans for landscaping construction shall have the following shown on either the cover or detail sheet.

CITY OF GOODYEAR GENERAL NOTES FOR CONSTRUCTION

- A. All construction shall conform to the City EDS&PM, City Standard Details, and current MAG Uniform Standard Specifications and Detail for Public Works Construction.
- B. This set of plans has been reviewed for compliance with City requirements prior to issuance of construction permits. However, such review shall not prevent the City from requiring correction of errors in plans found to be in violation of any law or ordinance.
- C. The City does not warrant any quantities shown on these plans.
- D. The City approval is for general layout in the right-of-way only. This approval is valid for a period of one year. Construction permits shall be obtained during this period or the plans shall be resubmitted for review and approval.
- E. An approved set of plans shall be available on the job site at all times.
- F. The City shall be notified 48-hours prior to any construction work and inspections (623-882-7979). Construction work concealed without inspection by the City shall be subject to exposure at the contractor's expense.
- G. Right-of-way improvements shall not be accepted until "As-built" plans have been submitted and approved by the City. (See as-built requirements)
- H. The developer is responsible for the removal or relocation of all obstructions within the right-of-way prior to starting new construction.
- I. The developer is responsible for arranging the relocation and associated costs of all utilities. A relocation schedule shall be submitted prior to the issuance of permits.
- J. The developer is responsible for obtaining or dedicating all required rights-of-way and easements to the City prior to issuance of permits.
- K. The contractor shall call BLUE STAKE (602-263-1100) at least 48-hours prior to construction.
- L. The contractor shall barricade construction sites at all times per the City of Phoenix Traffic Barricade Manual. When required by the City, a traffic control plan shall be submitted for approval in advance of construction.
- M. The contractor must request a meter for filling and testing of new water lines form their assigned Engineering Inspector. This meter should be ordered two working days prior to the start of construction. Potable water is not available for any other construction use. The unlawful removal of water from a fire hydrant or any other source is a violation of the municipal code, punishable by fine and/or imprisonment.

- N. Prior to moving or destroying protected native plant species, the Contractor shall file a formal Notice of Intent with the Arizona Department of Agriculture (602-542-6408).
- O. The contractor shall comply with the Environmental Protection Agency National Pollution Discharge Elimination System (NPDES) Storm water requirements established for construction sites.
- P. The contractor shall obtain a Dust Control Permit form the Maricopa County Air Quality Department.

CITY OF GOODYEAR GENERAL NOTES FOR LANDSCAPING

- A. The maintenance provider for all landscaped areas (after approval of the landscape construction) will be the [City of Goodyear] [Property Owner] Local Homeowner's Association]. If there is a split in maintenance responsibility, provide the breakdown of the area for each entity that will maintain the landscape and clearly indicate the different areas on the plans.
- B. Substitutions in type, and/or deviation in size or quality from the approved landscape or irrigation plans shall not be permitted without prior written approval from the City of Goodyear. (Contact the City of Goodyear Engineering Department for planting and irrigation substitutions.
- C. All plant material in public rights-of-way or City of Goodyear maintained areas in compliance with the Department of Water Resources low water use plant list for the Phoenix Active Management Area.
- D. All signs and monuments require a separate building approval and permits.
- E. All plant material and specifications are to conform to the Arizona Nurseryman's Association current standards.
- F. All existing landscape including trees, shrubs and irrigation systems that are designed to remain in the approved landscape plans, and are damaged or destroyed during construction, will be replaced in kind by the contractor.
- G. All plant material will be guaranteed for a minimum of sixty days from the date of final approval. Any plant material that has to be replaced under the terms of the guarantee shall be guaranteed for an additional sixty days from the date of replacement.
- H. If sidewalks and paving are part of the landscape improvements indicate that all onsite paving will meet design and construction requirements of the Americans with Disabilities Act.
- I. Identify the supplier/source of water for the irrigation system and indicate whether the supply is potable or non-potable.
- J. Warning signs will be located at pedestrian entrance/access points and spaced not more than 100 yards apart along frontage. These signs will be at least six inches square with black lettering on a white background. They will be labeled "WARNING: RECLAIMED WATER – DO NOT DRINK".
- K. All valve boxes will be installed with purple covers, and all irrigation pipe will be purple in cover. (Add only if system is non-potable).
- L. If the landscape construction of the project construction of the project is phased, indicate the method of dust, weed, and debris control of the undeveloped portions of the site.
- M. Maricopa County dust control and Landscape permits are required for all landscape work on residential, commercial, and industrial subdivisions.